



Air Quality Permitting Response to Public Comments

January 18, 2017

**Permit to Construct No. P-2015.0057
Project 61608**

**Alta Mesa - ML Investments 2-3
Payette, Idaho**

Facility ID No. 075-00029

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Final

Table of Contents

BACKGROUND.....	3
PUBLIC COMMENTS AND RESPONSES.....	3
APPENDIX	7

BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the proposed permit to construct for Alta Mesa Services, LP – ML Investments 2-3 from December 7, 2016 through January 6, 2017, in accordance with IDAPA 58.01.01.209.01.c. During this period, comments were submitted in response to DEQ's proposed action. Each comment and DEQ's response is provided in the following section.

PUBLIC COMMENTS AND RESPONSES

Public comments regarding the technical and regulatory analyses and the air quality aspects of the proposed permit are summarized below. Questions, comments, and/or suggestions received during the comment period that did not relate to the air quality aspects of the permit application, the Department's technical analysis, or the proposed permit are not addressed. For reference purposes, a copy of the Rules for the Control of Air Pollution in Idaho can be found at:

<http://adminrules.idaho.gov/rules/current/58/0101.pdf>.

Comment 1: Idaho's Air Quality rules (IDAPA 58.01.01.201) state "no owner or operator may commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining a permit to construct from the Department..." Given these explicit rules, we were surprised to find that this well is listed on the Idaho Department of Land's website as having a status of "producing," leading us to believe this well is violating this rule by currently operating without the proper permit(s).

ICL has commented on this discrepancy during public comment periods for previously permitted wells. In response to our concerns, DEQ has stated that the producing wells retroactively seeking air permits were covered by an Exemption Concurrence (EC) from DEQ (Project ID 61476) allowing them to operate due to their emissions being below regulatory concern. However, this EC only covered six (6) wells, and ML Investments 2-3 was not one of them. Thus, we renew our concern that Alta Mesa is in violation of Idaho's Air Quality Rules by operating an air-polluting source without a valid air permit.

Given the clear disregard for Idaho's Air Quality rules, we feel it is prudent for DEQ to enforce punitive measures on Alta Mesa for each day they were in violation. Seeing as ML Investments 2-3 is not covered by an EC, we request from DEQ specific details regarding how they will address this matter to ensure it does not happen again.

Response 1: Alta Mesa received an exemption concurrence from DEQ for the operation of a 400 bhp engine and a line heater on October 7, 2016. In accordance with IDAPA 58.01.01.220.02, the facility is required to keep exemption documentation on site which shall identify the exemption determined to apply to the source and verify that the source qualifies for the identified exemption. The records and documentation shall be kept for a period of time not less than five (5) years from the date the exemption determination has been made or for the life of the source for which the exemption has been determined to apply, whichever is greater, or until such time as a permit to construct or an operating permit is issued which covers the operation of the source. The owner or operator shall submit the documentation to DEQ upon request.

Comment 2: The EPA recently updated the New Source Performance Standards (NSPS) and permitting requirements¹ for oil and gas operations in an effort to reduce greenhouse gas emissions, most notably methane. Part of the updates included new standards at subpart OOOOa² for oil and gas facilities constructed after September 18, 2015. DEQ's Statement of Basis (SOB) describes this well as a new facility; therefore this well is likely subject to the applicable provisions of subpart OOOOa.

DEQ's SOB and Draft Permit for this facility outline compliance measures with 40 CFR 60 subpart OOOO, though it appears there is no discussion around the new standards within subpart OOOOa. If applicable the standards within subpart OOOOa should be included and discussed in DEQ's draft and final permit for this facility.

Response 2: Subpart OOOOa was promulgated for sources constructed after September of 2015. This well site was initially drilled and constructed prior to this date. If the well site is reconstructed or modified, the facility will be required to comply with Subpart OOOOa as applicability arises. The primary difference between Subpart OOOO and Subpart OOOOa is the expansion of gas well requirements to oil wells. ML Investments 2-3 is already regulated as a gas well and is required to meet all applicable requirements.

Comment 3: ML Investments 2-3 is located within the Little Willow Creek Valley, located roughly 6 miles from the city of New Plymouth, ID, and surrounded by six (6) other oil and gas wells (Attachment 1). We continue to strongly encourage DEQ to aggregate emissions from this well with all of the current or future wells within this valley. DEQ's air impact modeling results highlight that emissions from these well sites have broad dispersions, impacting air quality up to 7 miles away from the source (Attachment 2: Figure 1 from DEQ's Modeling Memorandum). The emissions from these wells will undoubtedly combine in the atmosphere and have a cumulative impact greater than what is predicted by solely analyzing each well site as an individual entity. Treating each well site as a solitary source does not capture the whole picture, and may inadvertently fail to predict harmful air quality violations as a result of cumulative impacts.

We understand that DEQ is able to circumvent this request for most wells based on the EPA's Source Determination Rule issued on May 12, 2016. However, as ML Investments 1-3 is within the buffer distance of one-quarter (1/4) mile of the proposed well, ML Investments 1-3 and 2-3 should be considered adjacent sources and therefore the emissions should be combined and their cumulative impacts assessed as part of this permitting process.

Additionally, as a state agency whose mission statement is *"To protect human health and preserve the quality of Idaho's air, land, and water for use and enjoyment today and in the future"*, we implore you to hold true to this mission and consider going beyond the minimum criteria required of you. Within a 1-mile radius of this well are five homes, and these wells are only 8 miles from the communities of Fruitland, New Plymouth, and Payette in Idaho and Ontario in Oregon. These communities are home to just under 25,000 residents (24,788 according to the most recent U.S. Census data), all of whom deserve access to clean air and are depending on DEQ to support them. At a minimum, these communities deserve accurate estimates of pollutant concentrations in the air they breathe, how those pollutants combine and interact once released to the atmosphere, and assurance that emission of these pollutants are being regulated to the fullest extent possible. Aggregating emissions from all well sites with overlapping dispersion areas would achieve all of these priorities.

Response 3: Based on the definition of facility as defined in the Rules for the Control of Air Pollution in Idaho, all three indicators identified in the definition of "facility" must be met for all of the pollutant-emitting activities to be considered one facility. These three indicators are common control, industrial grouping, and contiguous or adjacent properties.

On May 12, 2016, the U.S. Environmental Protection Agency (EPA) issued the Source Determination Rule to clarify permitting requirements for the oil and natural gas industry. EPA issued the rule to clarify when multiple pieces of equipment and activities in the oil and gas industry must be deemed a single source. The final rule defines the term "adjacent" to clarify that equipment and activities in the oil and gas sector that are under common control will be

considered part of the same source if they are located on the same site, or on sites that share equipment and are within ¼ mile of each other. DEQ incorporates by reference EPA rules, including aggregation of emissions for the oil and gas industry.

Although the ML Investments 2-3 well-site is only about 0.15 miles from the Alta Mesa ML Investments 1-3 facility, it does not share equipment with other well-sites and is therefore not considered as part of any other facilities.

DEQ also disagrees with the comment that emissions from this site should be aggregated with all current or future wells within this valley when evaluating the air impacts. Within approximately 0.5 miles, design value (equal to the 5-year average of upper 98th percentile impacts of the annual distribution of maximum daily 1-hour impacts, consistent with the form of the 1-hour NO₂ standard) drops to levels below 5 µg/m³. Within about 3 miles, design value impacts drop to levels below 1.0 µg/m³ at most locations.

DEQ analysts, responsible for evaluating air impact analyses of potential emissions from facilities applying for air emissions permits, performed a verification analysis of NO₂ impacts from the ML Investment 2-3 facility with emissions included from the potentially co-contributing ML Investment 1-3 facility that is within about 0.15 miles from the ML Investment 2-3 facility. Although the presence of the neighboring ML Investment 1-3 did effect the modeled design value at receptors near that facility, it did not change the modeled maximum design value. This result was expected based on the averaging period of the standard, the magnitude of emissions, and the distance between sites. The plume of the two sources must overlap almost exactly during a period when the primary source has relatively high impacts to enable a measurable co-contributing impact for a 1-hour averaging period.

DEQ staff responsible for reviewing point source impact analyses are highly confident that operation of the ML Investments 2-3 site will not cause or significantly contribute to a violation of the NO₂ 1-hour or annual National Ambient Air Quality Standards (NAAQS). DEQ staff are also confident that neighboring well sites, beyond 0.25 miles from the each other, will not have a measurable effect on maximum design value impacts (used for evaluation of compliance with the applicable standard) and well sites permitted to this point will not have a measurable effect on the design value background concentration used for impact analyses.

Comment 4: According to DEQ's modeling memorandum (memo), Alta Mesa was required to resubmit corrected analyses to DEQ because the coordinates in the original modeling efforts did not match the actual location of the proposed well site. While the corrected analyses were resubmitted to DEQ, Alta Mesa's permit application and associated modeling effort available to the public still retain incorrect coordinates for the proposed site. Alta Mesa's revised modeling results should be disclosed as part of DEQ's public comment period in order for the public to adequately scrutinize this application and provide relevant comments.

We also have concerns over the background concentration utilized for modeling NO_x impacts to ambient air quality as a result of this facility. DEQ has repeatedly chosen a value of 52.6 µg/m³ for background 1-hour NO₂ concentrations when performing NAAQS impact modeling. This value may have been representative of background concentrations during the permitting of initial wells being constructed in a pristine valley; however, there now exists six other co-contributing wells located near the proposed well, the closest of which is only 0.15 miles away (ML Investments 1-3). The use of 52.6 µg/m³ for background 1-hour NO₂ concentrations is no longer an accurate representation of actual ambient air quality.

The continued use of this background concentration value in multiple air impact analyses fails to account for additional emissions from each subsequent well that has been permitted in this valley. Each new well is contributing to an increase in the background concentration. While

increases from individual wells may be considered minimal by DEQ, the cumulative increase in background concentrations within this valley due to emissions from all wells would likely have a measurable increase in the background concentration. ICL initially discussed this concern with DEQ staff in July 2016 and was assured that DEQ Staff would account for increases in background concentrations associated with new oil and gas wells entering a production phase, however this does not appear to be the case.

ICL has raised this concern during previous comment periods for all nearby permitted wells. DEQ's response has entailed that increasing the background concentration of NO_x would only be necessary if emissions from nearby wells were to occur simultaneously in time and space. We are concerned by this position, as there are no provisions in any of these permits prohibiting that from happening. Thus, despite DEQ's belief that simultaneous emissions are unlikely to occur, there is still potential for simultaneous emissions to occur, therefore this scenario should be included in background concentration estimates.

At a minimum, DEQ's ambient air impacts modeling for this well should account for increases in background concentrations resulting from emissions from the adjacent ML Investments 1-3, located well within one-quarter mile of this well site. While this is the minimum necessary, we highly encourage consideration of emissions from all overlapping emission sources to be as protective of human health as possible.

Response 4: The minor correction in the modeling files for coordinates of the facility boundary, structures, and emissions points does not substantially alter the modeled results and does not represent an important change in methods or data used to demonstrate compliance with applicable standards.

DEQ disagrees with the comment that the 52.6 µg/m³ is not an appropriate NO₂ background concentration after operation of other well-sites in the area. Design value maximum modeled impacts, which usually occur within tens of meters from the facility ambient air boundary, represent the highest impact associated with that facility. Maximum receptor-specific impacts drop off quickly with downwind distance from the maximum impacted receptor, and impacts drop off quickly with rank from the design value (for example, the impact of the 10th highest 1-hour impact compared to the 8th highest impact). This is also demonstrated by results obtained when modeling ML Investments 1-3 as a co-contributing source. Inclusion of these co-contributing emissions did not change the design value impact of the ML Investments 2-3 facility.

Background concentrations represent the maximum design value levels of the pollutant, as are modeled impacts from the source. Therefore, using the maximum design value for both the background and modeled impact is a very conservative approach, as it is very unlikely for short averaging periods (1-hour averages) that such maximum impacts would occur simultaneously at any one point. Addition of a small number minor sources in an area may affect the distribution of 1-hour background impacts, but it is unlikely to affect the maximum design value background. These sources are an insignificant portion of the NO_x emissions in the area (background is assessed for a 4.0-kilometer grid area).

Emissions quantities of the well-sites in the area are simply not large enough to have a measurable impact on background concentrations, given the separation between individual well sites and the fact that background levels also represent the upper end of a mostly independent distribution.

Appendix

Public Comments Submitted for

Permit to Construct

P-2015.0057



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1/6/17

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Air Quality Division
DEQ State Office
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Boise, ID 83706

Kelli Wetzel
Air Quality Permitting Analyst
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Submitted via email: kelli.wetzel@deq.idaho.gov and anne.drier@deq.idaho.gov

RE: PTC number P-2015.0057, ML Investments 2-3 Well Site Facility

Dear Ms. Drier and Ms. Wetzel;

Thank you for the opportunity to comment on the draft air permit to construct (PTC) for Alta Mesa's ML Investments 2-3 Well Site Facility near New Plymouth, ID.

Since 1973, the Idaho Conservation League has been Idaho's leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho's air quality.

Idaho's Air Quality rules (IDAPA 58.01.01.201) state "no owner or operator may commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining a permit to construct from the Department. ..." Given these explicit rules, we were surprised to find that this well is listed on the Idaho Department of Land's website as having a status of "producing," leading us to believe this well is violating this rule by currently operating without the proper permit(s).

ICL has commented on this discrepancy during public comment periods for previously permitted wells. In response to our concerns, DEQ has stated that the producing wells retroactively seeking air permits were covered by an Exemption Concurrence (EC) from DEQ (Project ID 61476) allowing them to operate due to their emissions being below regulatory concern. However, this EC only covered six (6) wells, and ML Investments 2-3 was not one of them. Thus, we renew our concern that Alta Mesa is in violation of Idaho's Air Quality Rules by operating an air-polluting source without a valid air permit.

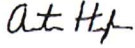
RE: Idaho Conservation League comments on Alta Mesa's PTC No. P-2015.0057

Page 1 of 7

Given the clear disregard for Idaho's Air Quality rules, we feel it is prudent for DEQ to enforce punitive measures on Alta Mesa for each day they were in violation. Seeing as ML Investments 2-3 is not covered by an EC, we request from DEQ specific details regarding how they will address this matter to ensure it does not happen again.

Our remaining comments are described in detail following this letter. Please do not hesitate to contact me at 208-345-6933 ext. 23 or ahopkins@idahoconservation.org if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely,



Austin Hopkins
Conservation Assistant

CC:

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RE: Idaho Conservation League comments on Alta Mesa's PTC No. P-2015.0057

Page 2 of 7

NSPS for Oil and Gas Well Sites

The EPA recently updated the New Source Performance Standards (NSPS) and permitting requirements¹ for oil and gas operations in an effort to reduce greenhouse gas emissions, most notably methane. Part of the updates included new standards at subpart OOOOa² for oil and gas facilities constructed after September 18, 2015. DEQ's Statement of Basis (SOB) describes this well as a new facility; therefore this well is likely subject to the applicable provisions of subpart OOOOa.

DEQ's SOB and Draft Permit for this facility outline compliance measures with 40 CFR 60 subpart OOOO, though it appears there is no discussion around the new standards within subpart OOOOa. If applicable the standards within subpart OOOOa should be included and discussed in DEQ's draft and final permit for this facility.

Cumulative Impact of Oil and Gas Wells

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Additionally, as a state agency whose mission statement is *"To protect human health and preserve the quality of Idaho's air, land, and water for use and enjoyment today and in the future"*, we implore you to hold true to this mission and consider going beyond the minimum criteria required of you. Within a 1-mile radius of this well are five homes, and these wells are only 8 miles from the communities of Fruitland, New Plymouth, and Payette in Idaho and Ontario in Oregon. These communities are home to just under 25,000 residents (24,788 according to the most recent U.S. Census data), all of whom deserve access to clean air and are depending on DEQ to support them. At a minimum,

¹ 81 FR 35825

² 80 FR 56593

these communities deserve accurate estimates of pollutant concentrations in the air they breathe, how those pollutants combine and interact once released to the atmosphere, and assurance that emission of these pollutants are being regulated to the fullest extent possible. Aggregating emissions from all well sites with overlapping dispersion areas would achieve all of these priorities.

Ambient Air Impact Modeling Analysis

According to DEQ's modeling memorandum (memo), Alta Mesa was required to resubmit corrected analyses to DEQ because the coordinates in the original modeling efforts did not match the actual location of the proposed well site. While the corrected analyses were resubmitted to DEQ, Alta Mesa's permit application and associated modeling effort available to the public still retain incorrect coordinates for the proposed site. Alta Mesa's revised modeling results should be disclosed as part of DEQ's public comment period in order for the public to adequately scrutinize this application and provide relevant comments.

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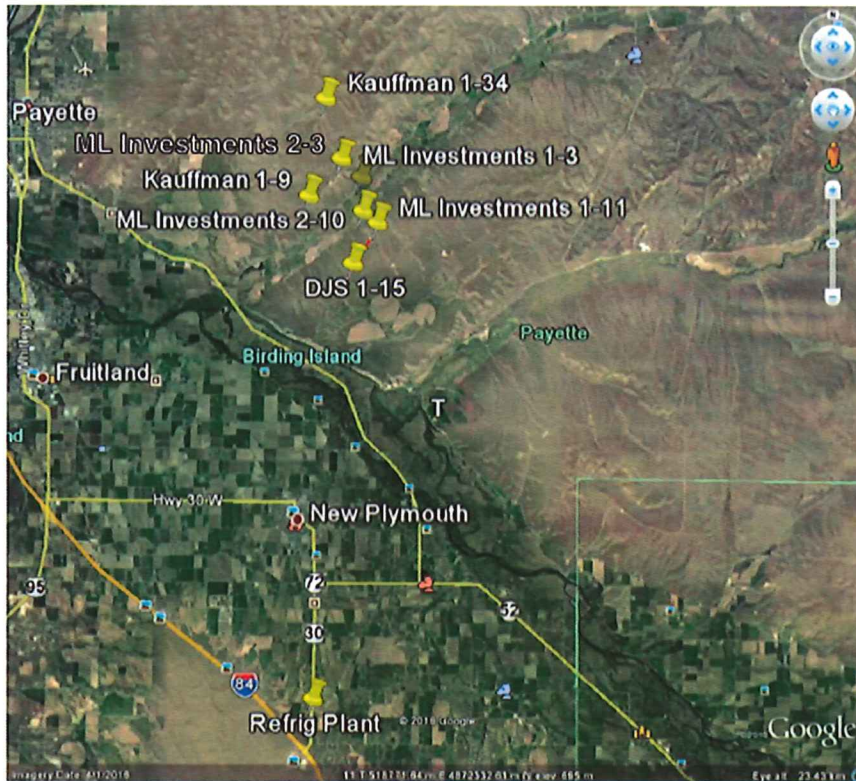
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Attachment 1



RE: Idaho Conservation League comments on Alta Mesa's PTC No. P-2015.0057

Page 6 of 7